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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,231	03/28/2006	Dirk Kruse	03100291AA	5181
30743 7590 01/23/2008 WHITHAM, CURTIS & CHRISTOFFERSON & COOK, P.C. 11491 SUNSET HILLS ROAD SUITE 340 RESTON, VA 20190				
			EXAMINER GREEN, ANTHONY J	
			ART UNIT 1793	PAPER NUMBER
			MAIL DATE 01/23/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/595,231

Applicant(s)

KRUSE ET AL.

Examiner

Anthony J. Green

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

## DETAILED ACTION

### *Response to Amendment*

1. The preliminary amendment submitted on 28 March 2006 has been entered..  
Claims 1-21 are currently pending.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1 it is unclear as to the types of materials that may be utilized as the ceramic-forming additives and volume-formers.

In claim 2 the use of the term "especially" renders the claim indefinite because it is unclear whether the limitations following the term are part of the claimed invention and the scope of the claim is unascertainable. See MPEP § 2173.05(d).

Claim 9 is vague and indefinite as it is unclear as to what is meant by "the composition is added as an addition to carbon foam-formers". Clarification is requested.

Claim 12 is confusing as it depends from claim 1 however claim 1 does not recite the presence of salts.

In claim 13 it is unclear as to the types of materials that may be utilized as the ceramic-forming additives and volume-formers.

In claim 14 it is unclear as to what is meant by the phrase "the material in question".

Claims 19-21 provide for the use of a composition, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

In claim 20 the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

#### ***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 19-21 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

#### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 3-6, 8, 10, 13-15 and 19-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Pirig et al (US Patent No. 6,251,961 B1).

The reference teaches, in the examples and the claims, compositions and methods of making the compositions that encompass that which is instantly claimed.

8. Claims 1-5, 8- 10, 13-15 and 19-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Lopez (US Patent No. 6,620,349 B1).

The reference teaches, in the Description of the Preferred Embodiments (Column 6, lines 32+) and the claims, compositions and methods of making the compositions that encompass that which is instantly claimed.

9. Claims 1-21 are rejected under 35 U.S.C. 102(b) as being anticipated by European Patent Specification No. EP 878520 A2.

The reference, according to the search report, teaches compositions and methods that encompass that which is instantly claimed. See especially the abstract and the claims.

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10. Claims 1-6, 8, 10, 13-15 and 19-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Scholz et al (US Patent No. 5,749,948 A).

The reference teaches, in the abstract and Example 1, compositions and methods that encompass that which is instantly claimed.

11. Claims 1-8, 10, 13-15 and 19-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Liu (US Patent Application Publication No. US 2004/0110870 A1).

The reference teaches, in the abstract, the examples and the claims, compositions and methods that encompass that which is instantly claimed. As for claim 7 the binders recited by the reference appear to encompass the instantly claimed radiation-curable coating material absent evidence showing otherwise.

12. Claims 1-8, 10, 13-15 and 19-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Hastings (US Patent No. 4,4,879,320 A and 4,965,296 A).

The references teach, in the description of the preferred embodiments, the examples and the claims, compositions and methods that encompass that which is instantly claimed. As for claim 7 the binders recited by the references appear to encompass the instantly claimed radiation-curable coating material absent evidence showing otherwise.

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***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pirig et al (US Patent No. 6,251,961 B1); Lopez (US Patent No. 6,620,349 B1); Scholz et al (US Patent No. 5,749,948 A); Liu (US Patent Application Publication No. US 2004/0110870 A1); and Hastings (US Patent No. 4,879,320 and 4,965,296 A).

The references were discussed previously.

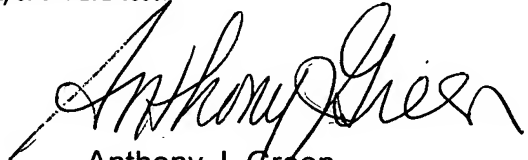
The instant claims are obvious over the references. While the references do not recite that the additives are ground with one another this appears to be a matter of obvious choice or design as it would have been obvious to one of ordinary skill in the art to grind the additives if a smaller particle size were needed or desired without producing unexpected results absent evidence showing otherwise.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony J. Green whose telephone number is 571-272-1367. The examiner can normally be reached on Monday-Thursday 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read "Anthony J. Green". The signature is fluid and cursive, with a long horizontal stroke at the end.

Anthony J. Green  
Primary Examiner  
Art Unit 1793

ajg  
January 14, 2008